

ProFX16 and ProFX22

The Mackie ProFX Series 4•Bus mixers include effects, graphic EQ and USB I/O all in one professional package.

The ProFX16 is a Professional 16-channel mixer with 10 mic preamps and four full stereo channels while the 22-channel ProFX22 comes with 16 mic preamps and four full stereo channels.

Each mic channel has an input Gain control with 50 dB of gain, a sharp 18 dB/octave, 100 Hz Low Cut filter, 3-band EQ (with mid-sweep on the mono channels), three Aux sends [two monitors and FX], Pan, Mute and a 60mm fader. There are dedicated inline compressors on the last four mono channels of each ProFX mixer and a Channel Insert jack for connecting an external processor on the remaining mono channels.

Additionally, the ProFX Series mixers include Mackie's classic high-headroom, low-noise mic preamps, integrated effects and a precision 7-band graphic EQ for tuning the room or the monitors.

The 32-bit RMFX™ processor has 16 "Gig-Ready" effects, including reverbs, choruses and delays. ProFX allows stereo playback from, and recording to, a computer via USB.

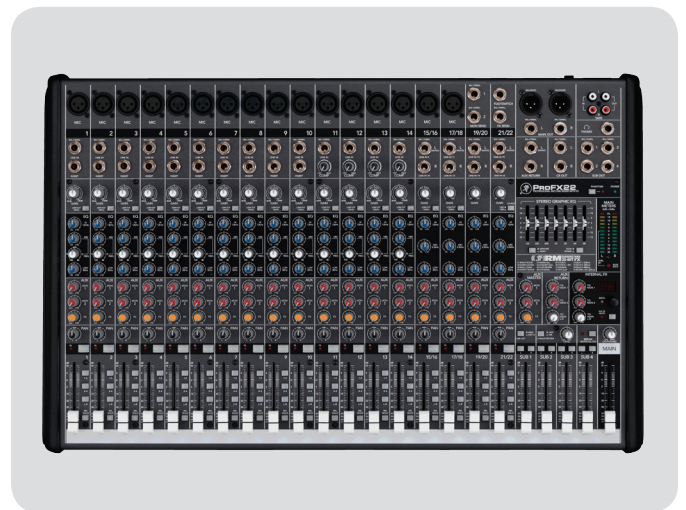
Other features include phantom power, a stereo tape input and output, a 1/4-inch stereo headphone jack, stereo 12-segment LED meters, XLR and TRS stereo output jacks and a footswitch jack to connect a remote control for muting the FX.

APPLICATIONS

Live sound mixing, houses of worship, clubs, gymnasiums, banquet halls, conference rooms, boardrooms, studio and field recording, video post-production, multimedia applications, broadcast, and many, many more.

FEATURES:

- Professional 4•Bus live sound mixer with onboard effects and USB I/O
- Low-noise, high-headroom Mackie mic preamps with +50 dB gain range



- Four dedicated inline compressors for critical inputs
- 32-bit RMFX™ processor with 16 "Gig-Ready" reverbs, choruses and delays
- Precision 7-band graphic EQ for tuning mains and monitors
- Stereo USB I/O for recording shows and music playback via Mac or PC
- 3-band EQ with sweepable midrange on mono channels
- Individual channel mute switches and overload (OL) indicators
- 18 dB/octave 100 Hz low cut filters on all mic channels
- Inserts on mono mic/line channels for connecting outboard processors
- 60mm faders for input channels, subgroups and mains
- 48V phantom power with LED
- FX mute button also controllable via footswitch
- Balanced XLR and balanced/unbalanced 1/4-inch main outputs
- Rack-mountable design using optional rack ears [ProFX16]
- Rugged steel chassis
- Switching multi-voltage power supply for worldwide use
- Includes Tracktion 3 Music Production Software for Mac or PC

ProFX16 and ProFX22 SPECIFICATIONS

Noise Characteristics

Equivalent Input Noise (EIN) (mic in to insert send out, 150 Ω source impedance, 20 Hz to 20 kHz) max gain	-128 dBu
Residual Output Noise	
All outputs, master levels off, all channel levels off	-95 dBu
All outputs, master levels unity, all channel levels off	-85 dBu
All outputs, master levels unity, one channel level unity	-85 dBu

Frequency Response

Mic input to any output (gain at unity, +0 dB / -1 dB)	20 Hz to 40 kHz
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Distortion (THD+N)

(20 Hz to 20 kHz bandwidth)	
Mic in to Main out (+4 dBu output)	<0.01 %

Attenuation and Crosstalk

Adjacent Inputs, 1 kHz	-90 dB
Fader Off, 1 kHz	-75 dB
Mute Switch/Break Switch Mute, 1 kHz	-100 dB

Common Mode Rejection Ratio (CMRR)

Mic In to Main Out, max gain, 1 kHz	70 dB
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Maximum Levels

All inputs	+22 dBu
Main Mix XLR	+28 dBu
All other outputs	+22 dBu

Impedances

Mic In	3.3 kΩ
Channel Insert Return	10 kΩ
All other inputs	20 kΩ
Tape output	1 kΩ
Phones output	25 Ω
All other outputs	120 Ω

Equalization

Mono Channels	
Low	±15 dB @ 80 Hz
Mid	±15 dB
	100 Hz - 8 kHz
High	±15 dB @ 12 kHz
Low Cut Filter	18 dB/octave @ 100 Hz
Stereo Channels	
Low	±15 dB @ 80 Hz
Mid	±15 dB @ 2.5 kHz
High	±15 dB @ 12 kHz

Maximum Voltage Gain (EQ Flat)

Mic input Channel to	
Insert Output	50 dB
Tape Output	60 dB
USB Output	50 dB
1/4" Main Output	70 dB
XLR Main Output	76 dB
Monitor Send	85 dB
FX Send	90 dB
Mono Line Input Channel to	
Insert Output	30 dB
Tape Output	40 dB
USB Output	40 dB
XLR Main Output	56 dB
Monitor Send	65 dB
FX Send	70 dB
Stereo Line Input Channel to	
Tape Output	30 dB
USB Output	30 dB
XLR Main Output	46 dB
Monitor Send	55 dB
FX Send	60 dB
Tape Input to	
XLR Main Output	36 dB
USB Input to	
XLR Main Output	36 dB
Stereo Return to	
Mon Output	30 dB
XLR Main Output	26 dB

ProFX16 and ProFX22 SPECIFICATIONS continued...

Digital Effects

I/O	Mono input / Stereo output
Number of Presets	16

Meters

Main L/R Mix	
Two columns of 12 segments each:	
OL (+20 dBu), +15, +10, +6, +3, 0 (0 dBu), -2, -4, -7, -10, -20, -30	
Channel OL LED	
Measured post-EQ, pre-fader (-3 dB before channel clipping)	18 dBu

7 Band Graphic EQ

Frequency Centers	125, 250, 500, 1k, 2k, 4k, 8k
Gain	±15 dB
Assignable to Main or Monitor, bypassable	

USB

Format	USB 1.1
I/O	Stereo Input / Stereo Output
A/D/A	16 Bit, 44.1 kHz / 48 kHz

Phantom Power

48 VDC to all Mic channels at once

AC Power Requirements

Power Consumption	40 watts (ProFX16) 45 watts (ProFX22)
Universal AC Power Supply	100 – 240 VAC, 50 – 60 Hz
Operating Temperature	0° – 40°C 32° – 104°F

Physical Properties (packaged product)

Height	8.0 in / 203 mm (both)
Depth	20.2 in / 513 mm (both)
Width	21.6 in / 549 mm (ProFX16) 28.1 in / 714 mm (ProFX22)
Shipping Weight	20 lb / 9.1 kg (ProFX16) 26 lb / 11.8 kg (ProFX22)

Physical Properties (product)

Front Height	1.7 in / 44 mm (both)
Rear Height	3.8 in / 97 mm (both)
Depth	16.0 in / 407 mm (both)
Width	18.7 in / 475 mm (ProFX16) 25.1 in / 639 mm (ProFX22)
Net Weight	13 lb / 5.9 kg (ProFX16) 18 lb / 8.2 kg (ProFX22)

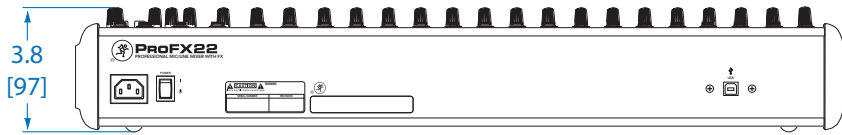
Options

Rack Ear Kit for ProFX16	P/N 2036168-00
Mixer Bag for ProFX16	P/N 2036809-10
Mixer Bag for ProFX22	P/N 2036809-11
Mixer Cover for ProFX16	P/N 2036809-12
Mixer Cover for ProFX22	P/N 2036809-13

Ordering Information

ProFX16 Professional Effects Mixer with USB, US	P/N 2036015-00
ProFX16 Professional Effects Mixer with USB, EU	P/N 2036015-01
ProFX22 Professional Effects Mixer with USB, US	P/N 2036026-00
ProFX22 Professional Effects Mixer with USB, EU	P/N 2036026-01

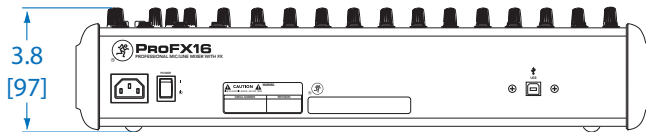
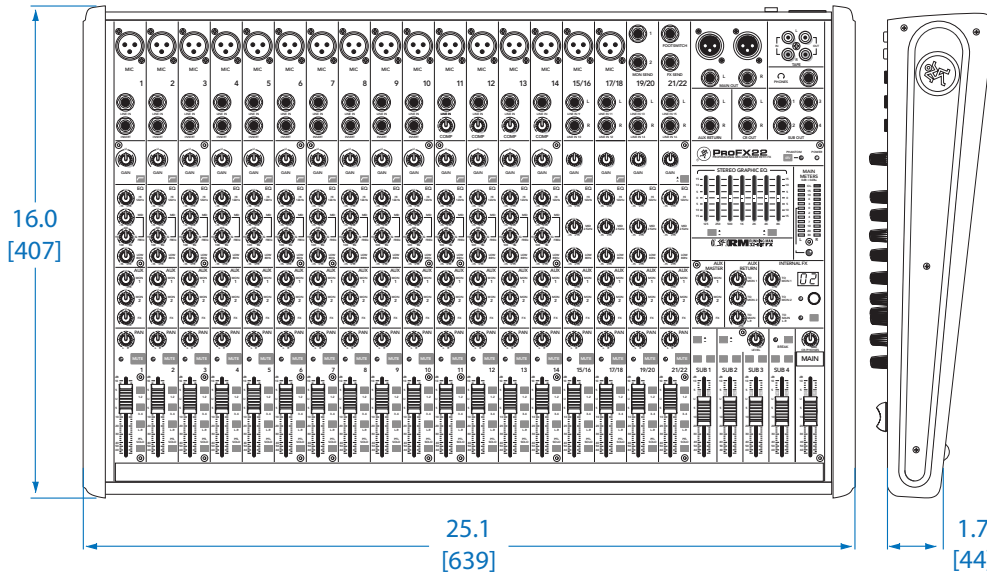
ProFX16 and ProFX22 DIMENSIONS



ProFX22 NOTES:

1. WEIGHT APPROX. 18 lb [8.2 kg].
2. SHIPPING WEIGHT APPROX. 26 lb [11.8 kg].

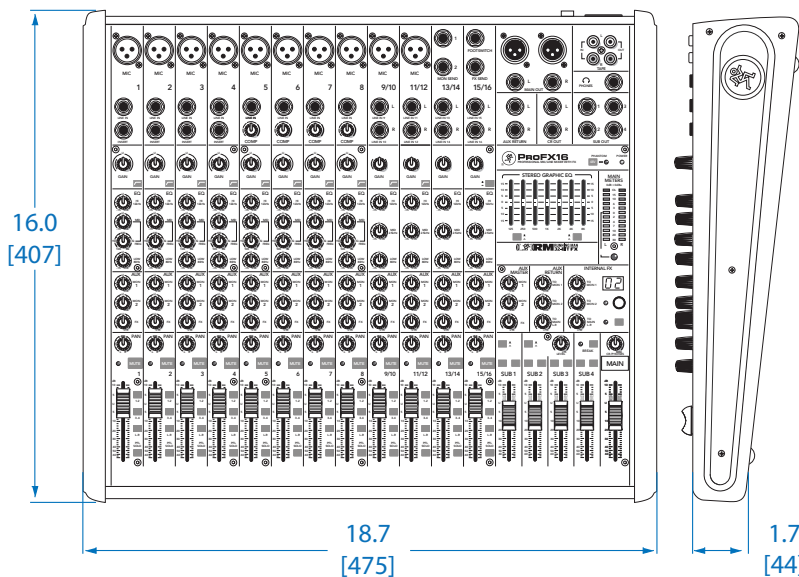
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. DUAL [MM] DIMENSIONS FOR REF ONLY



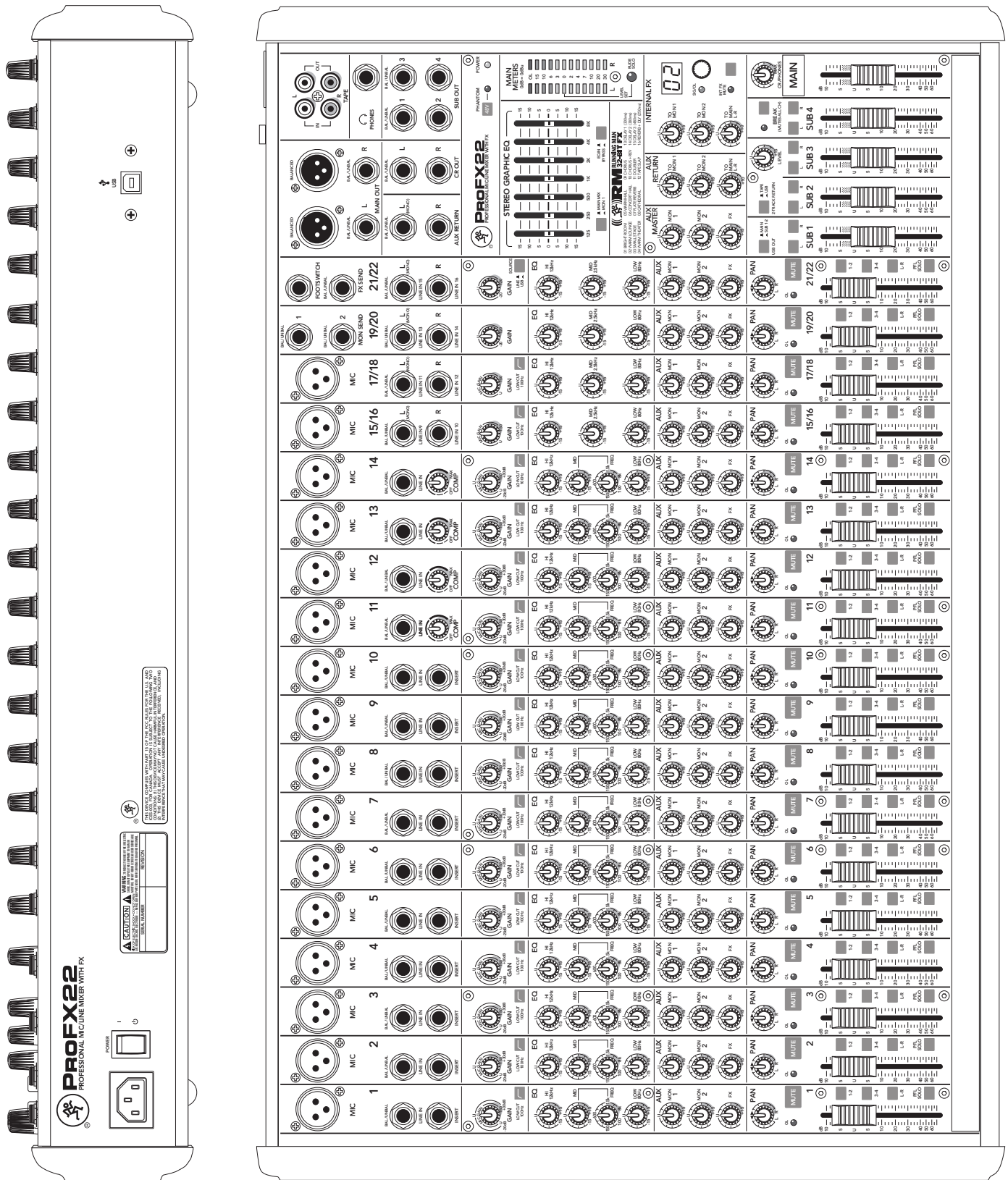
ProFX16 NOTES:

1. WEIGHT APPROX. 13 lb [5.9 kg].
2. SHIPPING WEIGHT APPROX. 20 lb [9.1 kg].

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. DUAL [MM] DIMENSIONS FOR REF ONLY



ProFX FRONT AND REAR PANELS (ProFX22 shown)



PROFX22
PROFESSIONAL MIXER WITH USB

CAUTION! WARNING: TO PREVENT DAMAGE TO THE MIXER, ALWAYS DISCONNECT THE USB CABLE FROM THE MIXER BEFORE PLUGGING IT INTO A COMPUTER. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY DAMAGE THE MIXER AND YOUR COMPUTER.

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Part No. SW0911 Rev. A 05/11

Electronic files for this product are available at:

www.mackie.com

Specification Sheet	PROFX16_22_SS.PDF
Owner's Manual	PROFX16_22_OM.PDF

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